

<u>Syllabus for the post of</u>		
<u>Assistant Professor, Physical Medicine and Rehabilitation (Medical Education), General State Service, Class-I (Advt. No. 76/2020-21)</u>		
Marks – 200	Questions – 200	Medium - English

1. Basic Anatomy and Physiology of the Musculoskeletal (including Biomechanics), Urogenital, Cardio-pulmonary and nervous systems, etc.
2. Basics of biochemical aspects of Calcium and Vit. D metabolism, osteoporosis, diabetes mellitus etc.
3. Basic Pathological processes causing diseases and disabilities, healing etc.
4. Basic principles of Pharmacology as applied to the conditions encountered in Physical Medicine and Rehabilitation.
5. Basic principles of diagnostic modalities as applied to Physical Medicine and Rehabilitation.
6. Philosophy, history, scope and need of Physical Medicine and Rehabilitation.
7. Basic concepts in Physical Medicine and Rehabilitation - definitions, rehabilitation team, team members, scope, role and responsibilities of different members etc.
8. Principles of evaluation and rehabilitation management of social problems
9. Principles of evaluation and rehabilitation management of vocational problems
10. Organisation and Administration of Physical Medicine and Rehabilitation services.
11. Disability process. Impairment, disability, International Classifications
12. Disability Prevention- levels and examples

13. Epidemiology of disability, magnitude, causes, changing trends etc.
14. Gait Analysis - Terminology, types, Clinical Applications
15. Electrodiagnostic Medicine - basic principles, clinical methods, interpretation etc.
16. Outcome Measures in Physical Medicine and Rehabilitation
17. Impairment Rating and Disability Evaluation
18. Therapeutic exercises - principles, types, indications, contraindications
19. Physical agents/modalities - principles, types, indications, contra- indications, precautions.
20. Manipulation, traction, massage - principles, types, indications, contraindications, precautions.
21. Electrical stimulation - principles, types, indications, contra-indications, Precautions
22. Principles and scope of Occupational Therapy
23. Rationale of A.D.L. (Activities of Daily Living) in various conditions
24. Integrative Medicine and Physical Medicine and Rehabilitation
25. Upper limb orthotic devices including splints – principles, types, materials and indications
26. Lower limb orthotic devices including footwear modifications– principles, types, materials and indications
27. Spinal orthoses – principles, types, materials and indications
28. Upper limb prosthetics and amputee rehabilitation

29. Lower limb prosthetics and amputee rehabilitation
30. Mobility aids, wheelchairs and seating systems
31. Low back pain and Physical Medicine and Rehabilitation
32. Musculoskeletal trauma and Physical Medicine and Rehabilitation
33. Holistic Rehabilitation of persons suffering from:
 - Arthritis, including Rheumatoid Arthritis, Osteoarthritis, Ankylosing Spondylitis etc.
 - Spinal deformity
 - Neck Pain, Shoulder Pain etc.
 - Osteoporosis
 - Sports Injury
 - Burns Injury
 - Spinal Cord Injury (traumatic and non-traumatic)
34. Rehabilitation of persons:
 - with obesity, dyslipidemia etc.
 - after Arthroplasty
 - after POP cast, Fracture treatment, Surgical intervention
35. Principles of Sports Medicine, diagnosis, evaluation, prevention, and management of sports injuries
36. Basic principles of rehabilitative surgeries such as deformity correction in poliomyelitis, cerebral palsy, clubfoot, contractures, revision of amputation stump, closure of pressure sore, tendon transfers etc.
37. Holistic Rehabilitation of persons suffering from:
 - Plexus or Nerve Injury
 - Traumatic Brain Injury
 - Stroke
 - Parkinsonism, Multiple sclerosis, Ataxia, neurodegenerative disorders etc.
 - Neuropathy, Bell's Palsy etc.

- Hansen's Disease
- Diseases of Muscles e.g. myopathy, motor-neuron disease, myasthenia gravis etc.
- Cerebral Palsy
- Spasticity
- Poliomyelitis and its sequelae
- Cardiovascular Disease e.g. CAD, MI, CABG Surgery, Angioplasty, Cardiac transplantation etc.
- Pulmonary Disease e.g. COPD, Bronchiectasis, Cystic fibrosis etc.
- Cancer
- Swallowing disorder
- Bladder dysfunction
- Bowel dysfunction
- Vertigo
- HIV/AIDS
- Chronic Pain
- Neural tube defects like meningomyelocele and hydrocephalus etc.

38. Rehabilitation of persons:

- after Organ Transplantation
- in ICU setting

39. Pediatric Rehabilitation including children with Autism Spectrum Disorders, learning disabilities, multiple disabilities etc.

40. Geriatric Rehabilitation

41. Principles of evaluation and rehabilitation management of persons with:

- visual impairment
- mental retardation
- hearing /speech impairment
- psychological problems or mental illness

42. Medical/ surgical Emergencies in Physical Medicine and Rehabilitation

43. Sexuality and Disability

44. Evidence-based Medicine and Physical Medicine and Rehabilitation
45. Legislation in relations to disability- National and International
46. Functional evaluation, Impairment rating, disability evaluation and certification including guidelines for these
47. Schemes and Benefits extended to persons with disabilities by the Govt.
48. Barrier-free Environment and access related issues
49. Computers in Physical Medicine and Rehabilitation
50. Assistive Technology related to Physical Medicine and Rehabilitation
51. Recent Advances related to Physical Medicine and Rehabilitation
52. Ethical aspects in rehabilitation
53. Research methodology
54. MEDICO LEGAL ASPECTS RELEVANT TO THE DISCIPLINE.
55. INDIAN MEDICAL COUNCIL (PROFESSIONAL CONDUCT, ETIQUETTE AND ETHICS) REGULATIONS, 2002.
56. CURRENT TRENDS AND RECENT ADVANCEMENTS IN THE FIELD OF PHYSICAL MEDICINE AND REHABILITATION.